

## **APPENDIX A**

### **STATEMENT OF WORK For Phase 1 of the Remedial Action at Operable Units 2-5 of the Lower Fox River and Green Bay Site**

#### **I. INTRODUCTION**

##### **A. Purpose**

The purpose of this Statement of Work (“SOW”) is to set forth the requirements for performance of Phase 1 of the Remedial Action in Operable Units 2-5 of the Lower Fox River and Green Bay Site (the “Site”). The Phase 1 Remedial Action will address contaminated sediment in a portion of Operable Unit 4 of the Site depicted on Figure 1 attached hereto (the “Phase 1 Project Area”). This area is located along the west bank of the Lower Fox River, just downstream from the De Pere Dam, in De Pere, Wisconsin. The work will be conducted under the accompanying Consent Decree for Performance of Phase 1 of the Remedial Action at Operable Units 2-5 of the Lower Fox River and Green Bay Site (the “Consent Decree”).

##### **B. Description of the Phase 1 Remedial Action**

1. The Settling Defendants will remove PCB-contaminated sediment from the Phase 1 Project Area, as depicted on Figure 1 attached to this SOW. The project will result in the removal of an estimated total of 118,900 cubic yards of in-place, contaminated sediments inside the Phase 1 Project Area. The targeted volume will be refined and may increase or decrease during the Phase 1 Remedial Design process described in Section II.A below. The Cleanup Objectives for the project are outlined below in Section I.C.

2. The Settling Defendants will dewater removed sediments (as needed), treat the associated wastewater, and dispose of the dewatered sediments in upland landfills. Sediments classified as Toxic Substances Control Act (“TSCA”) wastes shall be disposed of in accordance with TSCA disposal requirements, and non-TSCA wastes shall be disposed of in accordance with State solid waste disposal requirements.

3. The Settling Defendants will construct access roads, staging areas, work pads, and other infrastructure as necessary to accomplish the required sediment removal and to dewater and stabilize sediments as necessary to meet disposal requirements.

4. The Settling Defendants will provide or obtain the necessary utilities, site security, and support services to complete the project.

5. At the completion of the response activities, the Settling Defendants will restore the onshore area used for the response action in a manner approved by the Response Agencies. However, if the property owner agrees and the Response Agencies approve, the

Settling Defendants will be allowed to keep in place any infrastructure or improvements that might be useful for further phases of the Remedial Action.

### **C. Cleanup Objectives**

As specified by a duly-approved Phase 1 Remedial Action Plan required by Section II.B.1 of this SOW, sediments within the horizontal limits of the Phase 1 Project Area, as set forth in Figure 1, will be removed by either dredging or excavation to target elevations (i.e., vertical limits), as set forth in Figure 1, that were developed to target all PCB contaminated sediments with concentrations greater than 1 ppm. The areal extent of the Phase 1 Project Area encompasses all portions of the general area which have been identified through pre-design sampling and associated Thiessen polygon analysis to have sediment PCB concentrations exceeding 50 ppm. As provided by Sections II.A.1 and II.B.1 of this SOW and Subparagraph 12.b of the Consent Decree, the parties may agree to adjust the horizontal and/or vertical limits of the Phase 1 Project Area based on further analysis of recent sampling data. Removal of the contaminated sediments within the Phase 1 Project Area will proceed until the following objectives are met:

1. The final post-removal confirmatory sampling within the Phase 1 Project Area pursuant to Section II.C.3 of this SOW must indicate that all sediments containing PCBs at a concentration of 50 ppm PCBs or greater have been dredged or excavated.
2. The final post-removal confirmatory survey of the Phase 1 Project Area pursuant to Section II.C.3 of this SOW must indicate that sediment removal to the 1 ppm target elevation has been achieved over at least 95 percent of the Phase 1 Project Area.
3. If final post-removal confirmatory sampling reveals sediment with PCB concentrations exceeding 1 ppm remains within the Phase 1 Project Area, the Settling Defendants must place a minimum of six inches of clean sand over that area, consistent with the ROD. Any such clean sand shall be taken from an off-site source.
4. The Settling Defendants must establish side slopes adjacent to the Phase 1 Project Area that are sufficient to ensure the stability of remaining sediments. All side slopes with surface PCB concentrations exceeding 1 ppm must be covered with a minimum of six inches of clean sand, consistent with the ROD.

### **D. Applicable or Relevant and Appropriate Requirements to be Considered**

Permits are not required for this project pursuant to CERCLA Section 121(e)(1). The following substantive requirements will be met to the extent that they are applicable, or to the extent that they are relevant and appropriate and do not interfere with expeditious completion of the project:

The substantive requirements that, if a permit were required, would be set forth in a WDNR dredging permit (as appropriate).

The substantive water discharge limitation requirements that, if a permit were required, would be set forth in a WPDES Permit. These limitations will be described in the Phase 1 Remedial Action Plan, and the limitations set forth in the approved Phase 1 Remedial Action Plan will be met.

Sediments classified as TSCA wastes shall be disposed in accordance with TSCA disposal requirements, and non-TSCA wastes shall be disposed in accordance with State Solid Waste disposal requirements.

#### **E. Phase 1 Remedial Action Implementation**

The Phase 1 Remedial Action will consist of the following elements:

- Removal and Processing of PCB-contaminated sediment;
- TSCA and Non-TSCA Disposal; and
- Post-Removal Confirmatory Sampling and Surveys (including covering of residuals or exposed areas with sand, if necessary)

These steps are described below and shall be completed in accordance with the schedule provided below.

## **II. WORK TO BE PERFORMED**

#### **A. Phase 1 Remedial Design Activities**

The remedial design for Operable Units 2-5 at the Site is being prepared under an administrative settlement agreement between the Response Agencies and NCR Corporation and Fort James Operating Company, captioned In re Lower Fox River and Green Bay Site, U.S. EPA Region 5 CERCLA Docket No. V-W-'04-C-781 (the "Remedial Design Agreement"). A copy of the Remedial Design Agreement is attached as Appendix B to the Consent Decree. As provided by Consent Decree Paragraph 9, the Remedial Design Agreement is incorporated into the Consent Decree by reference, and all requirements under the Remedial Design Agreement are thereby made enforceable requirements of this Consent Decree, but only as to Settling Defendant NCR Corporation.

Settling Defendant NCR Corporation shall perform the Phase 1 Remedial Design (including pre-design activities) in accordance with the Remedial Design Agreement. Settling Defendant NCR Corporation shall submit the plans and reports described in this Section II.A to the Response Agencies pursuant to the Remedial Design Agreement and Consent Decree Paragraph 9. The design phase will consist of the activities described below.

1. Pre-Design Plan

A technical memorandum will be submitted that presents a preliminary construction plan that generally describes equipment, upland site preparation, removal and processing of PCB-contaminated sediment, TSCA and non-TSCA disposal, and post-construction sampling and surveys. This memorandum will also describe any planned supplemental evaluations, sampling and/or bench-scale treatability testing. As noted in Section I.C, the memorandum may propose revisions to Figure 1 attached to this SOW in order to adjust the horizontal and/or vertical limits of the Phase 1 Project Area, but any proposed revision and adjustment shall be subject to review and approval by the Response Agencies. The Pre-Design Plan shall be consistent with the ROD and with achieving the Cleanup Objectives described in Section I.C, above.

2. Quality Assurance Project Plan

A Quality Assurance Project Plan will be submitted consistent with Section IV below. All sampling and analysis will be done in accordance with the approved Quality Assurance Project Plan.

3. Sampling and Analysis Plan

A Sampling and Analysis Plan will be submitted that will describe the procedures and analytical techniques to be used for the following required sampling and monitoring:

Turbidity and Water Column PCB Monitoring – The Sampling and Analysis Plan shall propose a real-time turbidity monitoring system for monitoring the impacts of the dredging operations for approval by the Response Agencies. In-stream water column samples will be collected and analyzed for PCBs when turbidity measured by a downstream station is significantly higher than the turbidity measured by the upstream station, unless the Settling Defendants can demonstrate that the increased turbidity is not due to the dredging. More specific requirements with regard to turbidity will be established in the Sampling and Analysis Plan, and the requirements established in the approved Sampling and Analysis Plan will be met.

Dewatered Sediment Sampling – Dewatered sediment will be sampled as required by laws and regulations applicable to the facility receiving such sediment.

Post-Removal Confirmatory Sampling – Surficial sediments will be analyzed for PCBs as provided in Section II.C.3 of this SOW.

Effluent Sampling – Samples of treated effluent from the project will be obtained and analyzed in accordance with the substantive requirements specified in lieu of a WPDES permit.

Post-Dredging Bathymetric Survey – If the sediments are removed by dredging (rather than by dry excavation), a post-dredging bathymetric survey of the Phase 1 Project Area (and adjacent side slopes) will be conducted.

Post-Excavation Survey – If the sediments are excavated rather than being dredged, a survey will be conducted to confirm the final elevations in the Phase 1 Project Area (and adjacent side slopes).

4. Supplemental Geotechnical Borings

Additional geotechnical borings may be taken, if necessary, to further define the grain size, degree of consolidation, and possibly other geotechnical characteristics of the sediments in the Phase 1 Project Area and adjacent areas where stable side slopes will be established.

**B. Phase 1 Remedial Action Pre-Implementation Activities**

1. Phase 1 Remedial Action Plan

The Settling Defendants will submit a Phase 1 Remedial Action Plan, which will be a memorandum summarizing all relevant information collected during the design phase and describing the proposed remedial action plan and schedule to meet the Cleanup Objectives. The Phase 1 Remedial Action Plan will specify removal elevations and removal methods, dewatering and/or amendment processes, water treatment processes, disposal facilities and handling methods for both TSCA and non-TSCA, specific confirmatory sampling and surveying techniques, and sand cover placement methods. As noted in Section I.C, the Phase 1 Remedial Action Plan may propose revisions to Figure 1 attached to this SOW in order to adjust the horizontal and/or vertical limits of the Phase 1 Project Area, but any proposed revision and adjustment shall be subject to review and approval by the Response Agencies. The Phase 1 Remedial Action Plan shall be consistent with the ROD and with achieving the Cleanup Objectives described in Section I.C, above.

2. Pre-Removal Bathymetry

In order to project depth and quantities accurately, a new pre-removal survey will be conducted.

**C. Phase 1 Remedial Action Implementation Activities**

1. Removal and Processing

The Settling Defendants will remove sediments from the Phase 1 Project Area and adjacent areas, pursuant to the approved Phase 1 Remedial Action Plan, until the Cleanup Objectives and stable side slopes are achieved.

If sediments are dredged rather than being removed by dry excavation, the dredged sediments will be dewatered to a state acceptable for disposal.

## 2. TSCA and Non-TSCA Disposal

Sediments classified as TSCA wastes shall be disposed of in accordance with TSCA disposal requirements, and non-TSCA wastes shall be disposed of in accordance with State Solid Waste disposal requirements.

## 3. Post-Removal Confirmatory Sampling and Surveys

After removal of sediments by dredging or excavation, the Settling Defendants shall conduct Confirmatory Sampling and Surveys under this section to confirm that the Cleanup Objectives have been met. The Confirmatory Sampling shall be conducted consistent with the Sampling and Analysis Plan discussed in Section II.A.3, above. After the target elevation within a particular area has been reached, the Settling Defendants will collect and analyze surficial sediment samples for PCBs to verify that the Cleanup Objectives described in Section I.C have been met. If sediments are removed by dredging (rather than by dry excavation), the Settling Defendants also will conduct a post-dredging bathymetric survey of the area, and prepare a final comprehensive bathymetric survey report upon project completion. If the sediments are excavated (rather than being dredged), the Settling Defendants will conduct a post-excavation survey, and prepare a final comprehensive post-excavation survey report upon project completion.

# III. **ADDITIONAL ACTIVITIES**

The following additional activities shall also be conducted as part of the Phase 1 Remedial Action.

## A. **Health and Safety Plan**

The Settling Defendants shall prepare and implement a Health and Safety Plan.

## B. **Monthly Progress Reports**

During performance of the Phase 1 Remedial Action, the Settling Defendants shall submit monthly progress reports as required by Consent Decree Paragraph 23.

# IV. **PROJECT SCHEDULE**

The following major milestones are established for the project:

Pre-Design Plan – due to be submitted to the Response Agencies within 45 days after the Date of Lodging of the Consent Decree.

Quality Assurance Project Plan – due to be submitted to the Response Agencies within 45 days after the Date of Lodging of the Consent Decree.

Sampling and Analysis Plan – due to be submitted to the Response Agencies within 60 days after the Date of Lodging of the Consent Decree.

Selection of Contractor – notice of selection due to be submitted to the Response Agencies within 60 days after the Date of Lodging of the Consent Decree.

Phase 1 Remedial Action Plan – August 1, 2006 target date for submission, but due to be submitted to the Response Agencies no later than within 30 days after the Response Agencies' approval of the last of the preceding three design phase documents (i.e., the Pre-Design Plan, the Quality Assurance Project Plan, and the Sampling and Analysis Plan).

Health and Safety Plan – due to be submitted to the Response Agencies within 180 days after the Date of Lodging of the Consent Decree.

Begin Contractor Mobilization to the Dewatering/Treatment Area of the Site – due to begin within 60 days after the Response Agencies' written approval of the Phase 1 Remedial Action Plan, or at such other time specified in the approved Phase 1 Remedial Action Plan.

Start of Sediment Removal – due to begin within 60 days after the Response Agencies' written approval of the Phase 1 Remedial Action Plan, or at such other time specified in the approved Phase 1 Remedial Action Plan, but no later than May 1, 2007.



## Appendix A - Figure 1

#	Northing	Eastng
1	2208902.39	1458047.55
2	2209051.38	1457947.31
3	2208825.85	1457616.09
4	2209487.12	1457165.83
5	2209280.79	1456862.81
6	2209401.47	1456780.64
7	2209288.11	1456614.16
8	2209164.65	1456695.81
9	2208929.3	1456351.93
10	2209082.95	1456246.1
11	2208998.4	1456121.94
12	2208611.29	1456486.01
13	2208731.68	1456661.11
14	2208466.7	1456842.75
15	2208710.31	1457293.27
16	2208575.98	1457395.73

**LEGEND**



This topographic map shows a section of land with contour lines indicating elevation. Key features include:  
 - Contour lines labeled with elevations such as 570, 572, 573, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 636, 638, 640, 642, 644, 646, 648, 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674, 676, 678, 680, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 712, 714, 716, 718, 720, 722, 724, 726, 728, 730, 732, 734, 736, 738, 740, 742, 744, 746, 748, 750, 752, 754, 756, 758, 760, 762, 764, 766, 768, 770, 772, 774, 776, 778, 780, 782, 784, 786, 788, 790, 792, 794, 796, 798, 800.  
 - A proposed dredge cut area outlined in black, located near the center-right of the map.  
 - Elevation points marked with circles and numbers: 572, 573, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 636, 638, 640, 642, 644, 646, 648, 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674, 676, 678, 680, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 712, 714, 716, 718, 720, 722, 724, 726, 728, 730, 732, 734, 736, 738, 740, 742, 744, 746, 748, 750, 752, 754, 756, 758, 760, 762, 764, 766, 768, 770, 772, 774, 776, 778, 780, 782, 784, 786, 788, 790, 792, 794, 796, 798, 800.  
 - A road or path running horizontally across the middle of the map.

### Required Dredge Elevation

US PAPER PROPERTY

c4003-47

c4004-22

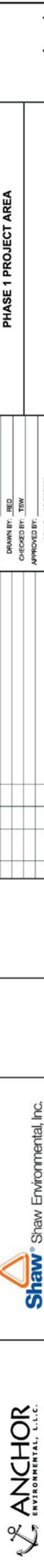
100 0 100

Feet



NOTES

1. Bathymetry based on survey work provided by Retec to WDNR and dated October, 2004.
2. Vertical Datum: IGLD85, U.S. Survey Feet
3. Horizontal Datum: Wisconsin Transverse Mercator (WTM) NAD 83/97, converted to U.S. Survey Feet



 Shaw Environmental, Inc.  
 DRAWN BY: RED  
 CHECKED BY: TSW  
 APPROVED BY: \_\_\_\_\_  
**PHASE 1 PROJECT AREA**

[illegible]

DESIGNED BY: JRL	<div style="text-align: center;"> <h2>LOWER FOX RIVER PHASE 1 PROJECT AREA</h2> </div>
DRAWN BY: RED	
CHECKED BY: TSW	
APPROVED BY:	
SCALE: AS SHOWN	
DATE: 02-13-06	

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[illegible]

SHEET NO. 1 OF 1